EXHIBIT 31

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF LOUISIANA
LAFAYETTE DIVISION

TOTAL REBUILD, INC.,	§	
	§	**Civil Action No. 6:15-cv-01855-RFD-PJH**
Plaintiff,	§	
	§	**JUDGE DOHERTY**
vs.	§	
	§	**MAGISTRATE WHITEHURST**
PHC FLUID POWER, L.L.C.	§	
	§	
	§	
Defendant.	§	

PLAINTIFF TOTAL REBUILD INC.'S SUPPLEMENTAL DISCLOSURE OF ASSERTED CLAIMS AND PRELIMINARY INFRINGEMENT CONTENTIONS AND ACCOMPANYING DOCUMENT PRODUCTION

Pursuant to Scheduling Order (Doc. 50), and the Parties agreed upon compliance with a modified version of the Patent Rules as set forth under the Local Rules of the United States District Court for the Eastern District of Texas for patent specific deadlines ("P.R."), Plaintiff Total Rebuild, Inc. ("Total") provides its Disclosure of Asserted Claims and Preliminary Infringement Contentions and Accompanying Document Production against PHC Fluid Power, L.L.C. ("PHC") in this action.

Total reserves the right to supplement these Preliminary Infringement Contentions, including the list of accused products and services, based upon further discovery. Further, Total may amend or supplement any of these disclosures and contentions in view of any claim construction ruling(s) issued by the Court or any position taken by PHC in this action, pursuant to P.R. 3-7. Total, therefore, expressly reserves the right to amend or supplement its identification of asserted claims, accused instrumentalities, and priority dates, as well as its claim charts, based on further investigation and discovery.

I. SUPPLEMENTAL IDENTIFICATION OF INFRINGED CLAIMS AND ACCUSED INSTRUMENTALITIES PURSUANT TO P. R. 3-1 (A) AND (B)

A. U.S. Patent Number 8,146,428 B2

1. P.R. 3-1(a) – Infringed Claims

Total presently contends that PHC infringes claims 3-5, 11-15, and 18-19 of U.S. Patent No. 8,146,428 B2 ("the '428 Patent") based on Total's understanding of the information currently available to Total regarding PHC's Accused Instrumentalities identified below.

2. P.R. 3-1(b) – Accused Instrumentalities

Total presently identifies the following PHC products as "Accused Instrumentalities" under all applicable subsections of 35 U.S.C. § 271 with respect to the respective asserted claims: all versions of all PHC products based upon the PHC Hydrostatic Testing Equipment made, used, rented, offered for sale, or sold in, or imported into, the United States since the '428 patent issued, including all services supporting such PHC products, such as unit repair services, training services, support services, and implementation and customization services. These identifications are based on a preliminary understanding of information currently available to Total, and Total reserves the right to supplement these identifications as discovery proceeds.

Such Accused Instrumentalities may further extend to PHC's High Pressure Hydrostatic Testing Systems, Automated High Pressure Testing Systems, Custom Hydrostatic Pressure Test Systems, Hydrostatic Test Packs, High/Low Hydraulic Test Skid, Multiple Valve Test Cabinet, Portable Offshore Test Cart, Portable Dual Pump Pack, Remote Gas/Liquid Test System, Remote Control Pump Skid, Remote Control Bunker System, Complete Turn Key Valve Test Package, and/or such systems including PHC's Portable Pressure Test Carts, PHC Data Acquisition System, and Hydraulic Control Panel, yet, as PHC has only provided a generic

description of the units on PHC's advertising webpage and as Total has not yet been permitted to examine the units, Total reserves the right to supplement the identifications and claim chart to include such units as discovery proceeds.

II. SUPPLEMENTAL CHART IDENTIFYING CLAIM ELEMENTS WITHIN ACCUSED INSTRUMENTALITIES PURSUANT TO P. R. 3-1(C)

Total provides a chart, attached as Exhibit A, which identifies where each limitation of each asserted claim is found in representative proof for each of the Accused Instrumentalities. The first column of each chart recites the limitations of the asserted claim verbatim. The second column shows an example of where a corresponding element is found in representative proof for each of the Accused Instrumentalities. These identifications are based on a preliminary understanding of information currently available to Total, and Total reserves the right to supplement these charts as discovery proceeds.

III. SUPPLEMENTAL LITERAL INFRINGEMENT AND INFRINGEMENT UNDER THE DOCTRINE OF EQUIVALENTS PURSUANT TO P. R. 3-1(D)

Total presently contends that the PHC Accused Instrumentalities literally infringe the asserted claims of the '428 Patent. Nevertheless, with respect to any claim element or limitation that may be found not to be literally embodied in the Accused Instrumentalities, Total contends in the alternative that the Accused Instrumentalities embody such claim elements or limitations under the doctrine of equivalents and that any claim element or limitation not found to be literally met is equivalently met because any difference between the claim element or limitation and the Accused Instrumentalities is not a substantial difference. Accordingly, Total contends that any asserted claim which the Accused Instrumentalities are not found to be embodied literally is nevertheless embodied by the Accused Instrumentalities under the doctrine of

equivalents under an operative doctrine of equivalents test, e.g., function- way-result or insubstantial differences tests.

IV. SUPPLEMENTAL DISCLOSURE PURSUANT TO P. R. 3-1(F)

Based on presently available information and current analysis, Total identifies the following Total products (at least as to certain members of the family of products) as products that practice at least one or more of the asserted claims of the '428 Patent since its priority date of Aug. 8, 2008: the Total "Patented Safety Test System" product, which practices, incorporates, or reflects Claims 3-5 and 11-15. Further, Total offers high pressure testing services which practice, incorporate, and reflect Claims 18-19. See Total's web page at: http://totalrebuild.com/.

Total's response is based on information currently known to Total and is without prejudice to Total's right to supplement its response during the course of litigation.

Respectfully submitted,

/s/ Chase A. Manuel_____
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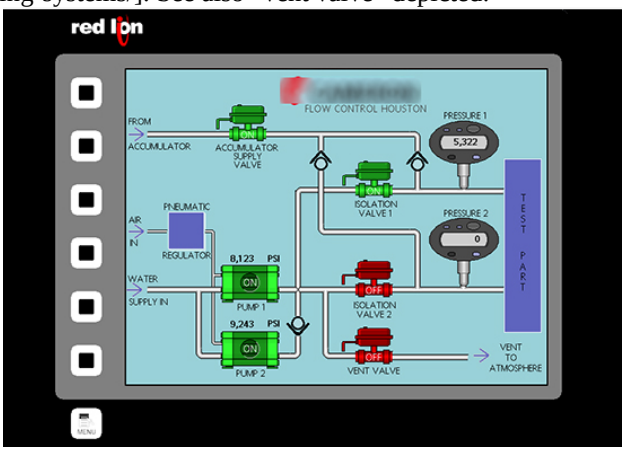
Attorneys for Plaintiffs Total Rebuild, Inc.

CERTIFICATE OF SERVICE

I hereby certify that on this, the 23rd day of January, 2017, a copy of Plaintiff's Supplemental Disclosure Of Asserted Claims And Preliminary Infringement Contentions And Accompanying Document Production was delivered upon counsel of record for PHC Fluid Power, L.L.C via electronic mail.

_____/s/ Chase A. Manuel_____
Chase A. Manuel

EXHIBIT A	
Total's Preliminary Infringement Contentions	
U.S. Patent No. 8,146,428 B2	**Accused Instrumentalities**
Claim 1. A safety system for testing high-pressure devices comprising:	PHC's systems are "high pressure hydrostatic testing systems" operating with liquids and gases, advertising "[a] wide variety of safety devices [] available with any of [their] high pressure testing systems". See Hydrostatic Testing Equipment description, [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/].
an explosion-proof safety housing;	The PHC Systems are described wherein "[a]ll high pressure is contained in the test cell" (See Automated High Pressure Testing Systems description, [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/automated-high-pressure-testing-systems/]). PHC's test cells being a 20 foot test cell with its own door or lid (description of PHC's Hydraulic Control Panel, [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydraulic-control-panel/]. PHC's Custom Hydrostatic Pressure Test Systems description stating "[t]hese systems can be provided as a **completely enclosed cabinet**". [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/custom-hydrostatic-pressure-test-systems/] (**emphasis added**). Pneumatic and Hydraulic Systems Brochure, previously provided as Exhibit D to Total's original Disclosure Of Asserted Claims And Preliminary Infringement Contentions And Accompanying Document Production, Complete Turn Key Valve Test Package description stating "remote controllable **pump and valve cabinet**". PHC's Hydrostatic Test Packs disclosing, "**self-contained** with all the components built-in an open frame stainless steel rack". [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydrostatic-test-packs/] (**emphasis added**). PHC's Portable Pressure Test Carts disclosing, "control box". [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/pressure-test-carts/]. Exhibit D (**emphasis added**). Multiple Valve Test Cabinet description describing "**pressure test cabinets** include pumps, controls and manual valves for pressurization". Exhibit D (**emphasis added**). Hydrostatic Test and Gas Charging Cabinet description describing "**Test cabinets** are available for hydro-testing or gas testing". Exhibit D (**emphasis added**). See also Exhibit D photographic depictions of enclosures and enclosed cabinets of PHC's Remote Control Bunker System, Remote Gas/Liquid Test System, and Portable Offshore Test Cart.
a high- pressure pneumatics testing equipment located	PHC's automated high pressure testing systems, stating that "[t]ests will not begin if any safety interlock device is not activated" and that "[a]ll high pressure is contained in the test cell", implying that the testing equipment is within the

within said housing;	housing. [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/automated-high-pressure-testing-systems/]. PHC's Hydrostatic Test Packs disclosing, that the system is "self-contained" to "generate liquid pressures, oil or water up to 60,000psi" with "all the components build-in". [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydrostatic-test-packs/]. PHC's Portable Pressure Test Carts having "[a]ll of the components [] mounted and plumbed in a stainless steel or powder-coated, 2-wheel cart with a sloped front control box containing the valves and gauges" with "[d]esigns for pressures up to 100,000 psi are available. [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/pressure-test-carts/]. PHC's Hydraulic Control Panel describing that its hydrostatic testing systems test pits contain pumps to test tools inside the test pits. [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydraulic-control-panel/]. The first and second subassemblies of PHC's Complete Turn Key Valve Test Package disclosing the large stainless steel reservoir having a high flow pump and the cabinet descried as a pump and valve cabinet. Exhibit D. Multiple Valve Test Cabinet description describing "pressure test cabinets **include pumps, controls and manual valves for pressurization**". Exhibit D (**emphasis added**). Portable Offshore Test Cart described as having a reservoir and pumps. Exhibit D. Upon information and belief, the PHC Hydrostatic Test and Gas Charging Cabinet, Remote Gas/Liquid Test System, and Remote Control Bunker System are equipped with high-pressure pneumatics testing equipment within their housings. Exhibit D.
a bleed valve coupled to said high-pressure pneumatics testing equipment;	PHC's Automated High Pressure Testing Systems boast use of valve components within its pressure system which can be used to depressurize the system. [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/automated-high-pressure-testing-systems/]. See also "vent valve" depicted:  PHC's Hydrostatic Test Packs disclosing, that the system can be equipped with vent valves and relief valves for additional safety. [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydrostatic-test-

	packs/]. PHC's Portable Pressure Test Carts containing safety devices, "such as relief valves". [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/pressure-test-carts/]. Upon information and belief, all of PHC's hydrostatic testing equipment use bleed valves coupled to the high pressure testing equipment within the housing.
a closeable access opening in said housing for inserting a high-pressure device for testing within said housing;	PHC's description of its Hydraulic Control Panel discloses that PHC's test cells and test pits contain a "door/lid". [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydraulic-control-panel/]. PHC Automated High Pressure Testing Systems as having "[p]roximity switches" integrated into the system "to completely depressurize the system in the event of personnel entering into the test area", shown as having an access.  Automated High Pressure Testing Systems [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/automated-high-pressure-testing-systems/#!]. See also the photographic depictions of PHC's Custom Hydrostatic Pressure Test Systems (http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/custom-hydrostatic-pressure-test-systems/) and High/Low Hydraulic Test Skid, Complete Turn Key Valve Test Package, Portable Offshore Test Cart, Portable Test Cart, Hydrostatic Test and Gas Charging Cabinet, Remote Gas/Liquid Test System, and Remote Control Bunker System, each showing an access. Exhibit D. Upon information and belief, the housings of PHC's hydrostatic testing equipment contain an access in their housings to allow for the placement of the desired tools for testing within the housing.
means within said housing for coupling said high-pressure pneumatics testing equipment to said high-pressure device for testing;	PHC's Hydrostatic Test Packs describing that "these hydrostatic test packs are self-contained with all the components built-in". [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydrostatic-test-packs/]. PHC's Portable Pressure Test Carts disclosing "[a]ll of the components are mounted and plumbed". [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/pressure-test-carts/]. PHC's Hydraulic Control Panel describing that PHC's test cells have "transfer pumps that pump corrosion inhibitor test fluid to the tools inside of the test pits." [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydraulic-control-panel/]. PHC's High/Low Hydraulic Test Skid having a large volume reservoir with dual parallel air operated pumps for high flow, high pressure hydraulic power and manual 4-way directional control valves. Exhibit D.

	PHC's Portable Offshore Test Cart having pumps. Exhibit D. See also the photographic depictions of PHC's Remote Gas/Liquid Test System showing pumps, plumbing, hose, manifolds, etc. within the housing. Upon information and believe, all of PHC's housed testing systems contain means within their housings to couple the desired equipment to be tested to the high pressure testing equipment.
a control panel located remote from said housing; and	PHC's Hydraulic Control Panel advertised for external control of test cells and further shown in a remote condition to the testing system:  Hydraulic Control Panel [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydraulic-control-panel/]. PHC's Automated High Pressure Testing Systems describing use of an "operator's control station" for controlling the system which may be a mouse or a touch-screen to operate all components and is further shown in a remote condition to the testing system.  Automated High Pressure Testing Systems [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/automated-high-pressure-testing-systems/#!]. PHC's Hydrostatic Test Packs disclosing "controls and gauges are panel mounted in a top plate for easy use and accessibility" on the external surface of the housing. [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydrostatic-test-packs/]. PHC's Portable Pressure Test Carts shown and described as having a "control box" over the housing.

	 [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/pressure-test-carts/]. See Exhibit D advertisement for PHC's Remote Gas/Liquid Test System and Remote Control Bunker System having "enclosed cabinets" advertised as being "Remote Control Systems". See also PHC's Custom Hydrostatic Pressure Test Systems (http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/custom-hydrostatic-pressure-test-systems/) and High/Low Hydraulic Test Skid, Multiple Valve Test Cabinet, Portable Offshore Test Cart, Complete Turn Key Valve Test Package, Gas/Hyd Pump System advertised in Exhibit D having control systems depicted remote from their housings.
means linking said high-pressure pneumatics testing equipment to said control panel for operating said high pressure pneumatics testing equipment within said safety housing from said control panel.	PHC's Hydraulic Control Panel is described and shown as being connected via cables and/or tubing for controlling transfer pumps:  Hydraulic Control Panel [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydraulic-control-panel/]. PHC's Automated High Pressure Testing Systems depicts cables and/or tubing connecting the control panel to the housing:  Automated High Pressure Testing Systems [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/automated-high-pressure-testing-systems/#!]. Furthermore, it is inherent within PHC's Custom Hydrostatic Pressure Test Systems, Remote Gas/Liquid Test System, Remote Control Bunker System, Gas/Hyd Pump System, Hydrostatic Test and Gas Charging Cabinet, Portable

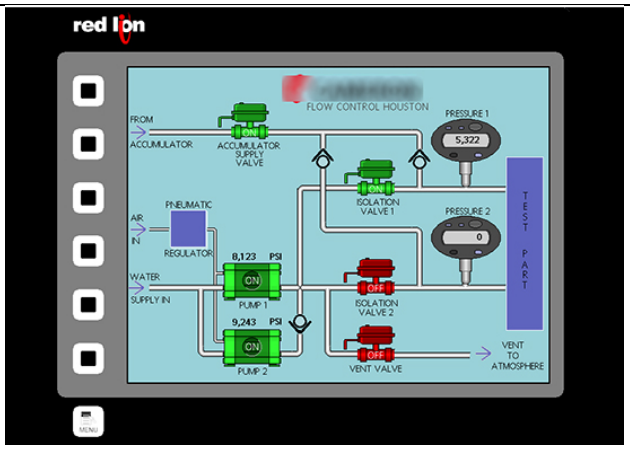
	Offshore Test Cart, Multiple Valve Test Cabinet, Complete Turn Key Valve Test Package, High/Low Hydraulic Test Skid, Hydrostatic Test Packs, and Portable Pressure Test Carts, each having remote control panels, that a means is present to link such panels to their respective testing housings.
Claim 3. The safety system for testing high-pressure devices as described in **claim 1** further including: a sensor for sensing that said access opening is closed, said sensor coupled to said bleed valve to activate said bleed valve to prevent pressure buildup in the high-pressure testing equipment if the access opening is not closed.	PHC's Automated High Pressure Testing Systems describe use of a "safety interlock device" which must be activated to begin a test and "Proximity switches" integrated into the system to completely depressurize the system in the event personnel should enter the test area. [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/automated-high-pressure-testing-systems/#!]. As Total's initial contentions are only based upon its preliminary understanding of the limited information currently available in PHC's web based advertisement and as Total has yet to be allowed to examine PHC's devices, Total reserves the right to supplement as discovery proceeds.
Claim 4. The safety system for testing high-pressure devices as described in **claim 3** wherein said sensor for sensing that said access opening is closed is located at said access opening.	PHC's Automated High Pressure Testing Systems describe that such "safety interlock device" must be activated for a test to begin and that such "Proximity switches" integrated into the system are situated to depressurize the system in the event personnel enter the test area. [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/automated-high-pressure-testing-systems/#!]. As Total's initial contentions are only based upon its preliminary understanding of the limited information currently available in PHC's web based advertisement and as Total has yet to be allowed to examine PHC's devices, Total reserves the right to supplement as discovery proceeds.
Claim 5. The safety system for testing high-pressure devices as described in **claim 3** wherein said bleed valve includes a spring maintaining said bleed	Though not directly described in the limited disclosure of PHC's product description, it is believed that such feature is implied by the inclusion of "relief valves". [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydrostatic-test-packs/; http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/pressure-test-carts/]; see also Exhibit D. As Total's initial contentions are only based upon its preliminary understanding of

valve in an opened condition to prevent pressure build-up in said high-pressure pneumatics testing equipment and is air operated to actuate said bleed valve to a closed condition to allow pressure build-up in said high-pressure pneumatics testing equipment.	the limited information currently available in PHC's web based advertisement and as Total has yet to be allowed to examine PHC's devices, Total reserves the right to supplement as discovery proceeds.
Claim 11. A safety system for testing high-pressure devices comprising:	PHC's systems are "high pressure hydrostatic testing systems" operating with liquids and gases, advertising "[a] wide variety of safety devices [] available with any of [their] high pressure testing systems". See Hydrostatic Testing Equipment description, [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/].
an explosion-proof safety housing;	The PHC Systems are described wherein "[a]ll high pressure is contained in the test cell" (See Automated High Pressure Testing Systems description, [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/automated-high-pressure-testing-systems/]). PHC's test cells being a 20 foot test cell with its own door or lid (description of PHC's Hydraulic Control Panel, [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydraulic-control-panel/]. PHC's Custom Hydrostatic Pressure Test Systems description stating "[t]hese systems can be provided as a **completely enclosed cabinet**". [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/custom-hydrostatic-pressure-test-systems/] (**emphasis added**). Pneumatic and Hydraulic Systems Brochure, previously provided as Exhibit D to Total's original Disclosure Of Asserted Claims And Preliminary Infringement Contentions And Accompanying Document Production, Complete Turn Key Valve Test Package description stating "remote controllable **pump and valve cabinet**". PHC's Hydrostatic Test Packs disclosing, "**self-contained** with all the components built-in an open frame stainless steel rack". [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydrostatic-test-packs/] (**emphasis added**). PHC's Portable Pressure Test Carts disclosing, "control box". [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/pressure-test-carts/]. Exhibit D (**emphasis added**). Multiple Valve Test Cabinet description describing "**pressure test cabinets** include pumps, controls and manual valves for pressurization". Exhibit D (**emphasis added**). Hydrostatic Test and Gas Charging Cabinet description describing "**Test cabinets** are available for hydro-testing or gas testing". Exhibit D (**emphasis added**). See also Exhibit D photographic depictions of enclosures and enclosed cabinets of PHC's Remote Control Bunker System, Remote Gas/Liquid Test System, and Portable Offshore Test Cart.

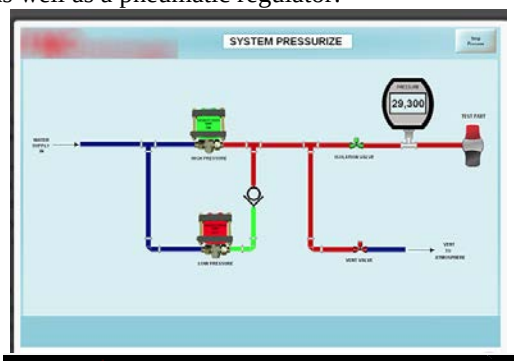
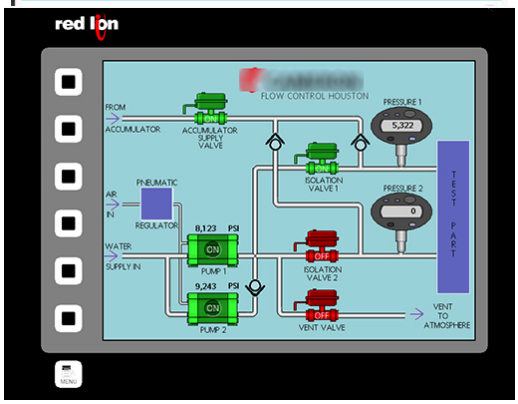
high-pressure pneumatics testing equipment located within said housing;	PHC's automated high pressure testing systems, stating that "[t]ests will not begin if any safety interlock device is not activated" and that "[a]ll high pressure is contained in the test cell", implying that the testing equipment is within the housing. [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/automated-high-pressure-testing-systems/]. PHC's Hydrostatic Test Packs disclosing, that the system is "self-contained" to "generate liquid pressures, oil or water up to 60,000psi" with "all the components build-in". [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydrostatic-test-packs/]. PHC's Portable Pressure Test Carts having "[a]ll of the components [] mounted and plumbed in a stainless steel or powder-coated, 2-wheel cart with a sloped front control box containing the valves and gauges" with "[d]esigns for pressures up to 100,000 psi are available. [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/pressure-test-carts/]. PHC's Hydraulic Control Panel describing that its hydrostatic testing systems test pits contain pumps to test tools inside the test pits. [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydraulic-control-panel/]. The first and second subassemblies of PHC's Complete Turn Key Valve Test Package disclosing the large stainless steel reservoir having a high flow pump and the cabinet descried as a pump and valve cabinet. Exhibit D. Multiple Valve Test Cabinet description describing "pressure test cabinets **include pumps, controls and manual valves for pressurization**". Exhibit D (**emphasis added**). Portable Offshore Test Cart described as having a reservoir and pumps. Exhibit D. Upon information and belief, the PHC Hydrostatic Test and Gas Charging Cabinet, Remote Gas/Liquid Test System, and Remote Control Bunker System are equipped with high-pressure pneumatics testing equipment within their housings. Exhibit D.
a closeable access opening in said housing for inserting a high-pressure device for testing within said housing;	PHC's description of its Hydraulic Control Panel discloses that PHC's test cells and test pits contain a "door/lid". [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydraulic-control-panel/]. PHC Automated High Pressure Testing Systems as having "[p]roximity switches" integrated into the system "to completely depressurize the system in the event of personnel entering into the test area", shown as having an access.  Automated High Pressure Testing Systems [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/automated-high-pressure-testing-systems/#!].

	See also the photographic depictions of PHC's Custom Hydrostatic Pressure Test Systems (http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/custom-hydrostatic-pressure-test-systems/) and High/Low Hydraulic Test Skid, Complete Turn Key Valve Test Package, Portable Offshore Test Cart, Portable Test Cart, Hydrostatic Test and Gas Charging Cabinet, Remote Gas/Liquid Test System, and Remote Control Bunker System, each showing an access. Exhibit D. Upon information and belief, the housings of PHC's hydrostatic testing equipment contain an access in their housings to allow for the placement of the desired tools for testing within the housing.
means within said housing for coupling said high-pressure pneumatics testing equipment to said high-pressure device for testing;	PHC's Hydrostatic Test Packs describing that "these hydrostatic test packs are self-contained with all the components built-in". [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydrostatic-test-packs/]. PHC's Portable Pressure Test Carts disclosing "[a]ll of the components are mounted and plumbed". [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/pressure-test-carts/]. PHC's Hydraulic Control Panel describing that PHC's test cells have "transfer pumps that pump corrosion inhibitor test fluid to the tools inside of the test pits." [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydraulic-control-panel/]. PHC's High/Low Hydraulic Test Skid having a large volume reservoir with dual parallel air operated pumps for high flow, high pressure hydraulic power and manual 4-way directional control valves. Exhibit D. PHC's Portable Offshore Test Cart having pumps. Exhibit D. See also the photographic depictions of PHC's Remote Gas/Liquid Test System showing pumps, plumbing, hose, manifolds, etc. within the housing. Upon information and believe, all of PHC's housed testing systems contain means within their housings to couple the desired equipment to be tested to the high pressure testing equipment.
a control panel located remote from said housing;	PHC's Hydraulic Control Panel advertised for external control of test cells and further shown in a remote condition to the testing system:  Hydraulic Control Panel [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydraulic-control-panel/]. PHC's Automated High Pressure Testing Systems describing use of an "operator's control station" for controlling the system which may be a mouse or a touch-screen to operate all components and is further shown in a remote condition to the testing system.

	 Automated High Pressure Testing Systems [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/automated-high-pressure-testing-systems/#!]. PHC's Hydrostatic Test Packs disclosing "controls and gauges are panel mounted in a top plate for easy use and accessibility" on the external surface of the housing. [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydrostatic-test-packs/]. PHC's Portable Pressure Test Carts shown and described as having a "control box" over the housing.  [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/pressure-test-carts/]. See Exhibit D advertisement for PHC's Remote Gas/Liquid Test System and Remote Control Bunker System having "enclosed cabinets" advertised as being "Remote Control Systems". See also PHC's Custom Hydrostatic Pressure Test Systems (http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/custom-hydrostatic-pressure-test-systems/) and High/Low Hydraulic Test Skid, Multiple Valve Test Cabinet, Portable Offshore Test Cart, Complete Turn Key Valve Test Package, Gas/Hyd Pump System advertised in Exhibit D having control systems depicted remote from their housings.
a bleed valve coupled to said high-pressure testing equipment;	PHC's Automated High Pressure Testing Systems boast use of valve components within its pressure system which can be used to depressurize the system. [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/automated-high-pressure-testing-systems/]. See also "vent valve" depicted:

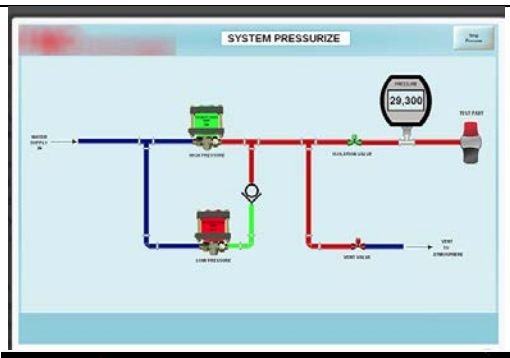
	 PHC's Hydrostatic Test Packs disclosing, that the system can be equipped with vent valves and relief valves for additional safety. [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydrostatic-test-packs/]. PHC's Portable Pressure Test Carts containing safety devices, "such as relief valves". [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/pressure-test-carts/]. Upon information and belief, all of PHC's hydrostatic testing equipment use bleed valves coupled to the high pressure testing equipment within the housing.
a sensor for sensing that said access opening is closed, said sensor coupled to said bleed valve to activate said bleed valve to prevent pressure buildup in the high-pressure testing equipment if the access opening is not closed; and	PHC's Automated High Pressure Testing Systems describe use of a "safety interlock device" which must be activated to begin a test and "Proximity switches" integrated into the system to completely depressurize the system in the event personnel should enter the test area. [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/automated-high-pressure-testing-systems/#!]. As Total's initial contentions are only based upon its preliminary understanding of the limited information currently available in PHC's web based advertisement and as Total has yet to be allowed to examine PHC's devices, Total reserves the right to supplement as discovery proceeds.
means linking said high-pressure pneumatics testing equipment to said control panel for operating said high pressure pneumatics testing equipment within said safety housing from said control panel.	PHC's Hydraulic Control Panel is described and shown as being connected via cables and/or tubing for controlling transfer pumps:  Hydraulic Control Panel [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydraulic-control-panel/]. PHC's Automated High Pressure Testing Systems depicts cables and/or tubing connecting the control panel to the housing:

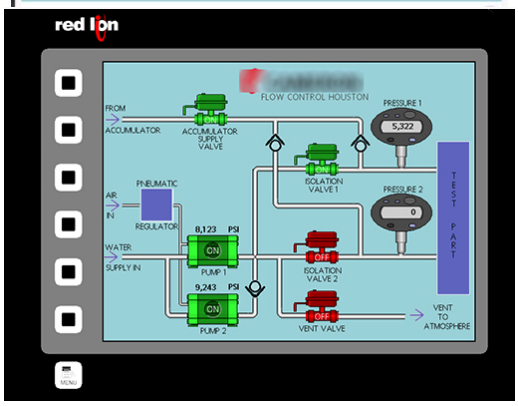
	 Automated High Pressure Testing Systems [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/automated-high-pressure-testing-systems/#!]. Furthermore, it is inherent within PHC's Custom Hydrostatic Pressure Test Systems, Remote Gas/Liquid Test System, Remote Control Bunker System, Gas/Hyd Pump System, Hydrostatic Test and Gas Charging Cabinet, Portable Offshore Test Cart, Multiple Valve Test Cabinet, Complete Turn Key Valve Test Package, High/Low Hydraulic Test Skid, Hydrostatic Test Packs, and Portable Pressure Test Carts, each having remote control panels, that a means is present to link such panels to their respective testing housings.
Claim 12. The safety system for testing high-pressure devices as described in **claim 11** wherein said means linking said high pressure pneumatics testing equipment to said control panel includes means for monitoring and recording of the operation of said high-pressure pneumatics testing equipment.	PHC's Automated High Pressure Testing Systems are described as having "[d]ata acquisition systems and PTZ camera systems" and "Electro-Pneumatic systems" an operator to recognize an open or closed valve. [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/automated-high-pressure-testing-systems/#!]. PHC's Hydrostatic Test Packs are advertised as having "[c]hart recorders or transducers" incorporated into the test packs to record tests as well as "gauges" mounted on the top plate of the housing. [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydrostatic-test-packs/]. PHC's portable test carts are described as having a "chart recorder". Exhibit D. optional chart recorder or data acquisition system Exhibit D further advertises PHC's Data Acquisition System for data logging and recording of pressure transducer values which, upon information and belief, may be used with any of PHC's Hydrostatic Pressure Test Systems. PHC's Custom Hydrostatic Pressure Test Systems disclose equipping a test system with a chart recorder or data acquisition system. [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/custom-hydrostatic-pressure-test-systems/]. See also PHC's depictions of all their Hydrostatic Testing Equipment, depicting use of computers, touch screens, chart recorders, and gauges. [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/; http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/custom-hydrostatic-pressure-test-systems/; http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/automated-high-pressure-testing-systems/#!; http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydrostatic-test-packs/; http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/pressure-test-carts/; and Exhibit D.
Claim 13. The safety	PHC's Automated High Pressure Testing Systems depict use of high and low

system for testing high-pressure devices as described in **claim 11** wherein said high-pressure equipment testing device includes a low-pressure pump, an intermediate-pressure pump, and a high-pressure pump to provide sequential increase in the pressure to said high-pressure devices being tested.	pressure pumps, as well as a pneumatic regulator:   [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/automated-high-pressure-testing-systems/#!]; see also Exhibit D. It is inherent that such desired pressure achieved by the pneumatic regulator be capable of providing an intermediate desired test pressure. PHC's Hydrostatic Test Packs disclose "providing hydrostatic pressure for a range of applications", including pressures up to 60,000 psi, and offering a "variety of pressure ranges and flow rates". [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydrostatic-test-packs/]. PHC's Portable Pressure Test Carts are described as having a capacity of pressures up to 100,000 psi. [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/pressure-test-carts/]. PHC's Dual Pump Cabinet with Data Acquisition advertises use of a high/low pump system providing high flow low pressure filling and high pressure low flow pressurization for testing. Exhibit D. PHC's High/Low Hydraulic Test Skid discloses use of "dual parallel air operated pumps for high flow, high pressure hydraulic power". Exhibit D. PHC's Complete Turn Key Valve Test Package discloses controllable pump and valve cabinet for generating liquid and/or gas pressure. Exhibit D. PHC's Portable Dual Pump Pack describes use of pumps which may be set to apply high and low pressurese including air controls. Exhibit D. See also PHC's Portable Offshore Test Cart and Gas/Hyd Pump System, each of which disclose use of pumps in testing. Exhibit D.

	It is inherent that the inclusion of high and low pressure pumps in the PHC hydrostatic test systems would also be capable of being employed as a low-pressure pump. Upon information and belief, PHC's Remote Gas/Liquid Test System and Remote Control Bunker System include a low-pressure pump, an intermediate pressure pump, and a high-pressure pump.
Claim 14. The safety system for testing high-pressure devices as described in **claim 11** wherein said explosion-proof safety housing comprises a portable housing.	PHC discloses that its Custom Hydrostatic Pressure Test Systems can be built to fit the unique requirements of each client, which Total asserts include portable housings. [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/custom-hydrostatic-pressure-test-systems/]. PHC's Hydrostatic Test Packs are disclosed as "Small and Portable" as one of its key features. [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydrostatic-test-packs/]. PHC's Portable Pressure Test Carts are described as being a portable cart. [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/pressure-test-carts/]. See also PHC's Dual Pump Cabinet with Data Acquisition, Portable Offshore Test Cart, Multiple Valve Test Cabinet, Hydrostatic Test and Gas Charging Cabinet, Gas/Hyd Pump System, and Remote Control Bunker System, each depicted as having wheels for portability. As Total's initial contentions are only based upon its preliminary understanding of the limited information currently available to Total and Total has not yet been permitted to examine the devices of PHC, Total reserves the right to supplement as discovery proceeds.
Claim 15. The safety system for testing high-pressure devices as described in **claim 11** wherein said bleed valve includes a spring maintaining said bleed valve in an opened condition to prevent pressure build-up in said high-pressure pneumatics testing equipment and is air operated in opposition to said spring to actuate said bleed valve to a closed condition to allow pressure build-up in said high-pressure pneumatics testing equipment.	Though not directly described in the limited disclosure of PHC's product description, it is believed that such feature is implied by the inclusion of "relief valves". [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydrostatic-test-packs/; http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/pressure-test-carts/]; see also Exhibit D. As Total's initial contentions are only based upon its preliminary understanding of the limited information currently available in PHC's web based advertisement and as Total has yet to be allowed to examine PHC's devices, Total reserves the right to supplement as discovery proceeds.
Claim 16. A method for safely testing high-	PHC offers a method of testing high-pressure devices through their "high pressure hydrostatic testing systems" operating with liquids and gases, advertising "[a] wide

pressure devices comprising the steps of:	variety of safety devices [] available with any of [their] high pressure testing systems". See Hydrostatic Testing Equipment description, [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/]; see also Exhibit D.
providing an explosion-proof safety housing;	The PHC Systems are described wherein "[a]ll high pressure is contained in the test cell" (See Automated High Pressure Testing Systems description, [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/automated-high-pressure-testing-systems/]). PHC's test cells being a 20 foot test cell with its own door or lid (description of PHC's Hydraulic Control Panel, [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydraulic-control-panel/]. PHC's Custom Hydrostatic Pressure Test Systems description stating "[t]hese systems can be provided as a **completely enclosed cabinet**". [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/custom-hydrostatic-pressure-test-systems/] (**emphasis added**). Pneumatic and Hydraulic Systems Brochure, previously provided as Exhibit D to Total's original Disclosure Of Asserted Claims And Preliminary Infringement Contentions And Accompanying Document Production, Complete Turn Key Valve Test Package description stating "remote controllable **pump and valve cabinet**". PHC's Hydrostatic Test Packs disclosing, "**self-contained** with all the components built-in an open frame stainless steel rack". [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydrostatic-test-packs/] (**emphasis added**). PHC's Portable Pressure Test Carts disclosing, "control box". [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/pressure-test-carts/]. Exhibit D (**emphasis added**). Multiple Valve Test Cabinet description describing "**pressure test cabinets** include pumps, controls and manual valves for pressurization". Exhibit D (**emphasis added**). Hydrostatic Test and Gas Charging Cabinet description describing "**Test cabinets** are available for hydro-testing or gas testing". Exhibit D (**emphasis added**). See also Exhibit D photographic depictions of enclosures and enclosed cabinets of PHC's Remote Control Bunker System, Remote Gas/Liquid Test System, and Portable Offshore Test Cart.
placing a low-pressure pump, an intermediate-pressure pump, and a high-pressure pump within said housing to provide sequential increase in the pressure to said testing high-pressure devices;	PHC's Automated High Pressure Testing Systems depict use of high and low pressure pumps, as well as a pneumatic regulator:





[http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/automated-high-pressure-testing-systems/#!]; see also Exhibit D. It is inherent that such desired pressure achieved by the pneumatic regulator be capable of providing an intermediate desired test pressure.

PHC's Hydrostatic Test Packs disclose "providing hydrostatic pressure for a range of applications", including pressures up to 60,000 psi, and offering a "variety of pressure ranges and flow rates". [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydrostatic-test-packs/].

PHC's Portable Pressure Test Carts are described as having a capacity of pressures up to 100,000 psi. [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/pressure-test-carts/].

PHC's Dual Pump Cabinet with Data Acquisition advertises use of a high/low pump system providing high flow low pressure filling and high pressure low flow pressurization for testing. Exhibit D.

PHC's High/Low Hydraulic Test Skid discloses use of "dual parallel air operated pumps for high flow, high pressure hydraulic power". Exhibit D.

PHC's Complete Turn Key Valve Test Package discloses controllable pump and valve cabinet for generating liquid and/or gas pressure. Exhibit D.

PHC's Portable Dual Pump Pack describes use of pumps which may be set to apply high and low pressurese including air controls. Exhibit D.

See also PHC's Portable Offshore Test Cart and Gas/Hyd Pump System, each of which disclose use of pumps in testing. Exhibit D.

It is inherent that the inclusion of high and low pressure pumps in the PHC

	hydrostatic test systems would also be capable of being employed as a low-pressure pump. Upon information and belief, PHC's Remote Gas/Liquid Test System and Remote Control Bunker System include a low-pressure pump, an intermediate pressure pump, and a high-pressure pump.
forming a closeable access opening in said housing;	PHC's description of its Hydraulic Control Panel discloses that PHC's test cells and test pits contain a "door/lid". [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydraulic-control-panel/]. PHC Automated High Pressure Testing Systems as having "[p]roximity switches" integrated into the system "to completely depressurize the system in the event of personnel entering into the test area", shown as having an access.  Automated High Pressure Testing Systems [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/automated-high-pressure-testing-systems/#!]. See also the photographic depictions of PHC's Custom Hydrostatic Pressure Test Systems (http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/custom-hydrostatic-pressure-test-systems/) and High/Low Hydraulic Test Skid, Complete Turn Key Valve Test Package, Portable Offshore Test Cart, Portable Test Cart, Hydrostatic Test and Gas Charging Cabinet, Remote Gas/Liquid Test System, and Remote Control Bunker System, each showing an access. Exhibit D. Upon information and belief, the housings of PHC's hydrostatic testing equipment contain an access in their housings to allow for the placement of the desired tools for testing within the housing.
inserting a high-pressure device for testing within said housing through said access opening;	Total asserts that all of PHC's testing devices having an access allow for the insertion of devices within their housings. [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/custom-hydrostatic-pressure-test-systems/; http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/automated-high-pressure-testing-systems/#!; http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydrostatic-test-packs/; http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/pressure-test-carts/#!; http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydraulic-control-panel/#!; Exhibit D.
providing a control panel outside said housing;	PHC's Hydraulic Control Panel advertised for external control of test cells and further shown in a remote condition to the testing system:

Hydraulic Control Panel

[http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydraulic-control-panel/].

PHC's Automated High Pressure Testing Systems describing use of an "operator's control station" for controlling the system which may be a mouse or a touch-screen to operate all components and is further shown in a remote condition to the testing system.

Automated High Pressure Testing Systems

[http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/automated-high-pressure-testing-systems/#!].

PHC's Hydrostatic Test Packs disclosing "controls and gauges are panel mounted in a top plate for easy use and accessibility" on the external surface of the housing. [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydrostatic-test-packs/].

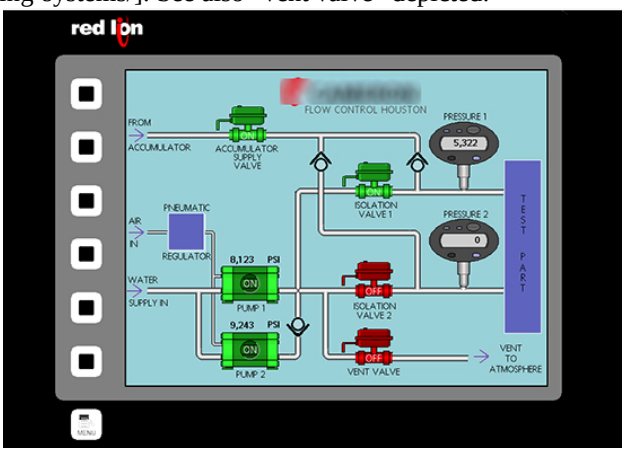
PHC's Portable Pressure Test Carts shown and described as having a "control box" over the housing.

[http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/pressure-test-carts/].

See Exhibit D advertisement for PHC's Remote Gas/Liquid Test System and Remote Control Bunker System having "enclosed cabinets" advertised as being "Remote Control Systems".

See also PHC's Custom Hydrostatic Pressure Test Systems (http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/custom-hydrostatic-pressure-test-systems/) and High/Low Hydraulic Test Skid, Multiple

	Valve Test Cabinet, Portable Offshore Test Cart, Complete Turn Key Valve Test Package, Gas/Hyd Pump System advertised in Exhibit D having control systems depicted remote from their housings.
coupling said control panel to the testing equipment inside said housing; and then	PHC's Hydraulic Control Panel is described and shown as being connected via cables and/or tubing for controlling transfer pumps:  Hydraulic Control Panel [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydraulic-control-panel/]. PHC's Automated High Pressure Testing Systems depicts cables and/or tubing connecting the control panel to the housing:  Automated High Pressure Testing Systems [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/automated-high-pressure-testing-systems/#!]. Furthermore, it is inherent within PHC's Custom Hydrostatic Pressure Test Systems, Remote Gas/Liquid Test System, Remote Control Bunker System, Gas/Hyd Pump System, Hydrostatic Test and Gas Charging Cabinet, Portable Offshore Test Cart, Multiple Valve Test Cabinet, Complete Turn Key Valve Test Package, High/Low Hydraulic Test Skid, Hydrostatic Test Packs, and Portable Pressure Test Carts, each having remote control panels, that a means is present to link such panels to their respective testing housings.
operating said high-pressure pneumatics testing equipment from said control panel for testing high-pressure devices.	PHC's Automated High Pressure Testing Systems are described as being touch screen operated wherein the electro-pneumatic systems provide the operator with lighted switches to indicate the presence of an open or closed valve. [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/automated-high-pressure-testing-systems/#!]. PHC's Hydraulic Control Panel is described as operating to turn on and off the power to transfer pumps that pump corrosion inhibitor test fluid to the tools inside the test pits. [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydraulic-control-panel/]. PHC's High/Low Hydraulic Test Skid having a large volume reservoir with dual parallel air operated pumps for high flow, high pressure hydraulic power and manual 4-way directional control valves. Exhibit D. Upon information and believe, all of PHC's testing systems contain means for

	operating the high pressure testing equipment to test desired equipment.
Claim 18. The method for safely testing high-pressure devices as described in **claim 16** including the step of: providing a bleed valve coupled to said high-pressure testing equipment; and	PHC's Automated High Pressure Testing Systems boast use of valve components within its pressure system which can be used to depressurize the system. [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/automated-high-pressure-testing-systems/]. See also "vent valve" depicted:  PHC's Hydrostatic Test Packs disclosing, that the system can be equipped with vent valves and relief valves for additional safety. [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydrostatic-test-packs/]. PHC's Portable Pressure Test Carts containing safety devices, "such as relief valves". [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/pressure-test-carts/]. Upon information and belief, all of PHC's hydrostatic testing equipment use bleed valves coupled to the high pressure testing equipment within the housing.
providing a sensor for sensing that said access opening is closed, said sensor coupled to said bleed valve to activate said bleed valve to prevent pressure buildup in the high pressure testing equipment if the access opening is not closed.	PHC's Automated High Pressure Testing Systems describe use of a "safety interlock device" which must be activated to begin a test and "Proximity switches" integrated into the system to completely depressurize the system in the event personnel should enter the test area. [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/automated-high-pressure-testing-systems/#!]. As Total's initial contentions are only based upon its preliminary understanding of the limited information currently available in PHC's web based advertisement and as Total has yet to be allowed to examine PHC's devices, Total reserves the right to supplement as discovery proceeds.
Claim 19. The method for safely testing high-pressure devices as described in **claim 18** wherein said bleed valve includes a spring maintaining said bleed valve in an opened condition to prevent pressure build-up in	Though not directly described in the limited disclosure of PHC's product description, it is believed that such feature is implied by the inclusion of "relief valves". [http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/hydrostatic-test-packs/; http://pneumaticandhydraulic.com/hydrostatic-testing-equipment/pressure-test-carts/]; see also Exhibit D. As Total's initial contentions are only based upon its preliminary understanding of the limited information currently available in PHC's web based advertisement and as Total has yet to be allowed to examine PHC's devices, Total reserves the right to supplement as discovery proceeds.

said high-pressure pneumatics testing equipment and is air operated to actuate said bleed valve to a closed condition to allow pressure build-up in said high-pressure pneumatics testing equipment.	